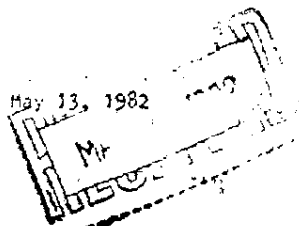


PHILIP MORRIS U. S. A.
INTER-OFFICE CORRESPONDENCE
RICHMOND, VIRGINIA

To: Mr. W. C. Hamilton
From: K. A. Stover
Subject: TESTING AND EVALUATION OF C-100 PROCESS

Date: May 13, 1982



Engineering, R & D, and Operations Services will work together to test and evaluate the C-100 process parts received from Celanese. The people assigned to the project are K. Stover (Engineering), C. Jackson (Operations Services), and D. Laslie (R & D). The testing will be done in three stages as follows:

- STAGE I - Determine plug characteristics for machine without C-100 parts installed.
- STAGE II - Determine plug characteristics for machine with C-100 parts installed.
- STAGE III - Do analytical testing comparing plugs made with C-100 parts to plugs made in the Manufacturing Center.

Testing can begin as soon as the engineering KDF-2 is installed and tune and test is complete. The machine will be run as it is set up for a 126 x 24.7mm plug. The 3.3 x 44,000 (-10) tow item and the 612 plug wrap will be used. Tows supplied by both Eastman and Celanese should be tested. All materials including tow, plugwrap, hot melt, plasticizer, and PVA will be supplied by Operations Services. The C-100 process was demonstrated to Philip Morris while using a Hauni/Celanese plasticizer monitor system. Operations Services will arrange to get a monitor system from Celanese until the monitor bought by Engineering is delivered.

The plug characteristics studied in the Stage I and the Stage II testing include the following:

1. Capability
2. Range
3. Yield
4. Circumference Variability
5. Weight Variability
6. Firmness
7. Targets and Position in Range
8. Length Variation
9. Percent Plasticizer Variation

Emphasis during Stage I will be on variabilities. During the Stage II testing, plugs will be made using the Hauni, Eastman, and Filtrona transport jets to compare variability between the three. During all stages of testing, problems such as roll-wraps and excessive garniture heat will be monitored.

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TESTING AND EVALUATION OF C-100 PROCESS (Continued)

The Stage III testing will involve making plugs for cigarettes which will be compared to cigarettes with plugs made in the Manufacturing Center. The following analytical tests will be run:

1. Subjective Smoking
2. Filtration Efficiency
3. Tar Delivery
4. Particle Fallout

All plugs made with the C-100 process will be made from the 3.3 x 44,000 tow. These will be compared to brands such as Marlboro Lights 100's which now uses a 3.7 x 48,000 tow. This comparison is part of the goal of the C-100 process for consolidating tow items. The C-100 plugs will also be compared to plugs already using the 3.3 x 44,000 tow.

If there are any additions or corrections to this testing plan, please call me at extension 3867.



K. A. Stover

KAS/csd

cc: J. E. Bickett
J. S. Crichton
C. D. Jackson
G. A. Kraft
D. E. Laslie
W. A. Nichols
H. Vogt/G. W. Tew/C. R. Hayward
File CA06-0001

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